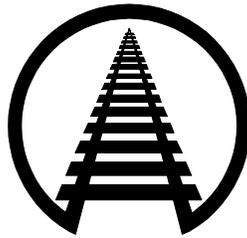


**STATEMENT OF**

**EDWARD R. HAMBERGER**

**PRESIDENT & CHIEF EXECUTIVE OFFICER**

**ASSOCIATION OF AMERICAN RAILROADS**



**BEFORE THE**

**FEDERAL ENERGY REGULATORY COMMISSION**

**DOCKET NO. AD 06-8-000**

**HEARING ON ELECTRICITY RELIABILITY**

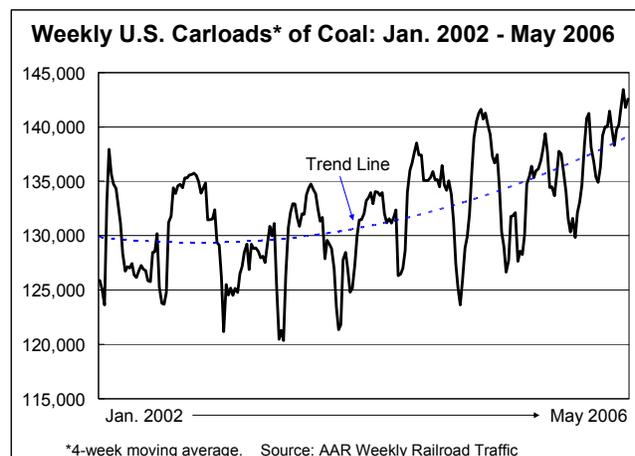
**JUNE 15, 2006**

## Introduction

On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to discuss the role of railroads in helping to ensure the reliability of coal-fired electricity generation. AAR members account for the vast majority of freight railroad mileage, employees, and revenue in Canada, Mexico, and the United States, and, therefore, are directly involved in crucial aspects of the coal supply chain. In fact, the more than 550 freight railroads operating in the United States today deliver some two-thirds of our coal to final destinations. Thanks to railroads, U.S. coal consumers and producers have access to the most comprehensive and efficient coal transportation system in the world.

The Commission should know, first and foremost, that contrary to what some rail critics wrongly claim, railroads' coal delivery abilities are anything but broken. In 2005, U.S. railroads moved more coal than ever before, and are on

pace to significantly exceed their 2005 coal movements in 2006. In fact, average weekly U.S. coal carloadings in May 2006 were the highest of any month in history, and U.S. coal carloadings in January, February, March, and April 2006 were all among the top months in history too.



This statement will focus on freight railroads, but railroads are just one part of a much larger interconnected coal supply chain. A complete assessment of the reliability of coal-fired electricity generation must include an examination of actions taken (or not taken) by all elements in this chain, including coal producers, other coal transporters, and coal consumers. Some of the topics that are germane to a complete examination include, among others, utility management of

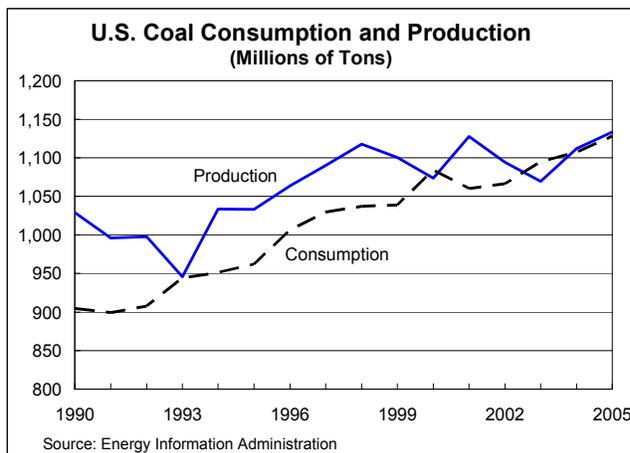
coal inventories over the long term; the patterns and consequences of massive utility investments in gas-fired power plants and their impact on producers and transporters of coal; coal unloading capacity at power plants; coal producers' ability to meet rapidly increasing demand; the adequacy of electricity transmission capacity; the capacity of waterways to move coal; and the impact of fluctuating natural gas prices on coal demand.

In light of all of these factors, it is irresponsible for electric utilities to attempt to lay the alleged reliability problem solely at the feet of the railroads. It is particularly disingenuous when many of these factors — including coal stockpile management, massive investments in non-coal generating assets, coal unloading capability, and investment in transmission assets — are within the purview of utilities, not railroads.

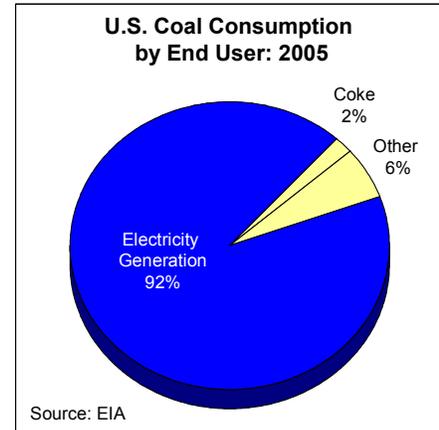
Therefore, while I am glad to be here to testify today, I am disappointed that FERC is concentrating on only a single factor of the multi-factored coal delivery chain, instead of taking the comprehensive approach required for a thorough and conclusive appraisal, as I recommended in my May 3 letter to the Commission.

## Overview of Coal

The ready availability of domestic coal as a primary energy source has been critical to U.S. economic development. U.S. coal production and consumption have been trending higher for decades, and in 2005 totaled more than 1.1 billion tons — higher than ever before and more than any country in the world except China.



More than 90 percent of coal in the United States is used to generate electricity. Coal accounted for 50 percent of U.S. electricity generation in 2005, far more than any other fuel.

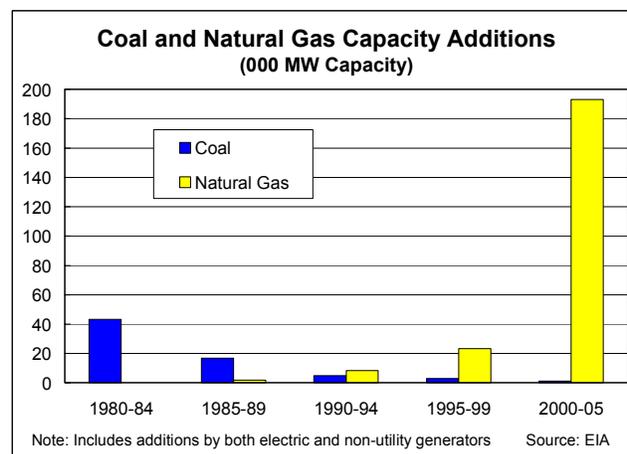


The amount of electricity generated by coal in the United States rose from 1.6 billion megawatthours in 1990 to 2.0 billion megawatthours in 2005 — an increase of 420 million, or 26 percent. But because overall U.S. electricity generation rose 33 percent during this period, coal’s share of total generation actually fell, from 52.5 percent in 1990 to 49.9 percent in 2005.

	1990	2005
Coal	52.5%	49.9%
Nuclear	19.0%	19.3%
Nat. Gas	12.6%	19.0%
Hydro	9.5%	6.4%
Petrol.	4.2%	3.0%
Other	2.2%	2.4%

Source: EIA

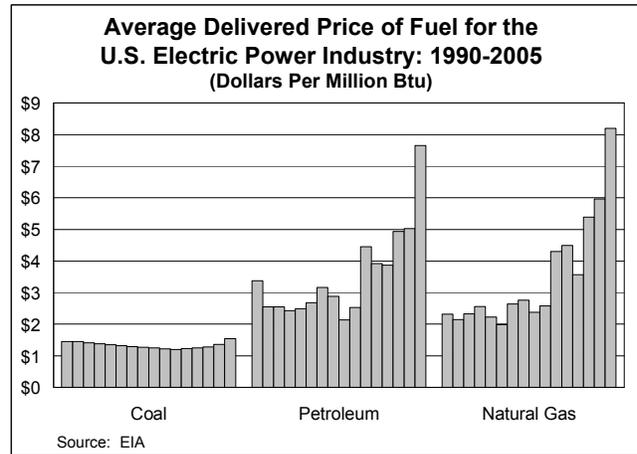
By contrast, natural gas’s share of U.S. electricity generation rose from 12.6 percent in 1990 to 19.0 percent in 2005, a consequence of the huge amounts of gas-fired capacity that were added. According to the U.S. Department of Energy’s Electricity Information Administration (EIA), from 1990 through 2005, U.S. electricity generators added just nine gigawatts of new coal capacity, while 225 gigawatts of natural gas capacity were added. From 2000 to 2005, one gigawatt of new coal capacity was added, while 193 gigawatts of natural gas capacity were added.



Natural gas was the fuel of choice for new capacity for several reasons. Gas plants could be constructed relatively quickly and enjoyed an easier permitting process, and thus were less expensive to build. They were also considered

to be “environmentally friendly.” Perhaps most importantly, though, it was assumed that natural gas would remain cheap and plentiful.

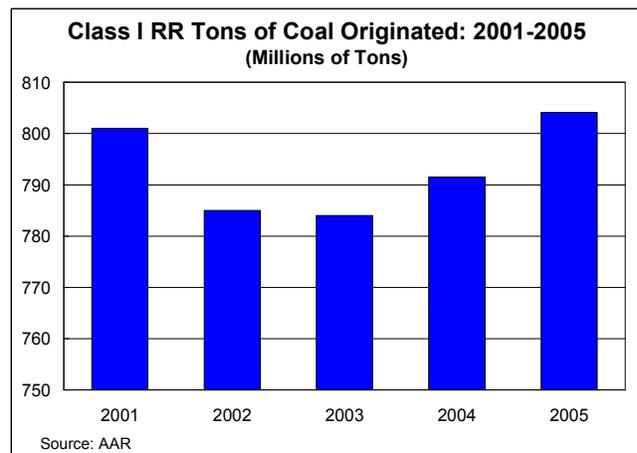
This, of course, did not happen. Over the past few years, the price of natural gas to utilities has skyrocketed, making gas-fired generation less competitive and sparking increased demand for electricity generated from coal, putting additional strain on coal suppliers and transporters. In contrast to the



delivered price of natural gas, the delivered price of coal to utilities has remained basically flat, and on a per-Btu basis is far below the comparable figure for natural gas.

This unexpectedly strong increase in the demand for coal occurred at the same time that serious weather-related problems (described in more detail below) disrupted rail traffic and overall demand for rail transportation overall was rising sharply. As a result, in some cases demand for coal exceeded the capability of coal producers to supply the coal and coal transporters to haul it.

That’s not surprising. By their actions, utilities had clearly shown their preference for natural gas — one reason why railroad coal traffic in terms of tons originated was actually lower in 2002, 2003, and 2004 than it was in 2001.



Utilities have peak demand capacity built into their asset base for ratemaking purposes. In other words, the costs of the capacity (whether baseload or peak) they need to serve their customers are covered by the rates they charge.

By contrast, railroads cannot afford to keep — because their customers, including utilities, are not willing to pay for — spare capacity to have on hand “just in case.” Thus, before investments in capacity enhancements are made, railroads must be confident that traffic and revenue will remain high enough in the long term to justify the enhancements, and that the investment will produce benefits greater than the scores of alternative possible investment projects. In this regard, railroads are no different than the vast majority of firms in our economy.<sup>1</sup> If rail customers want added capacity to improve rail “reliability,” they must be willing to pay for that capacity.

Moreover, when business is unexpectedly strong, railroads cannot expand capacity as quickly as they might like. Locomotives, for example, can take a year or more to be delivered following their order; new entry-level employees take six months or more to become hired, trained, and qualified; and it can take a year or more to plan and build, say, a new siding. Even with these limitations, the fact that railroads are moving as much coal as they are today is a testament to the diligence with which they address the capacity issue.

### **Background on Coal Transportation**

Because coal is consumed in large quantities throughout much of the country, while most production is focused in a relatively small number of states, an efficient coal transportation system is a necessity. Thanks to railroads (and other transportation modes), coal transportation

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<sup>1</sup> It is doubtful that utilities, who are clamoring for more rail coal-carrying capacity, would be willing to commit to utilizing that capacity even if natural gas prices were to fall to previous levels, thereby making natural gas-based generation more competitive than it currently is.

in the United States has become so sophisticated that regionally-defined markets need no longer exist. Rather, coal can be transported essentially from wherever it is mined to wherever consumers want to burn it.

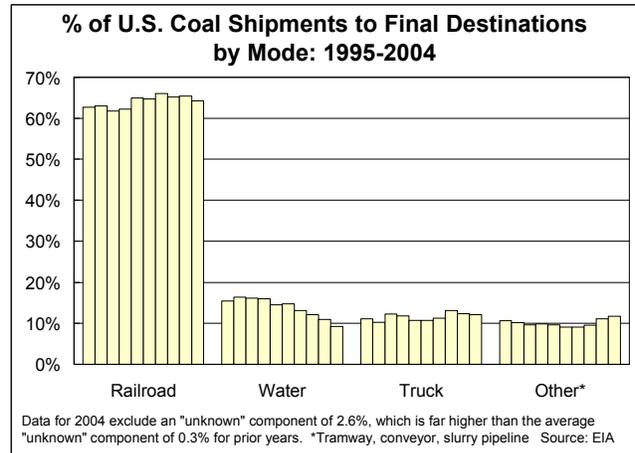
All major transportation modes except airlines carry large amounts of coal.

According to the EIA, 64 percent of U.S. coal shipments were delivered to their final domestic destinations by rail in 2004,

followed by truck (12 percent); the aggregate

of conveyor belts, slurry pipelines, and tramways (12 percent); and water (9 percent, of which 8 percentage points were inland waterways and the remainder tidewater or the Great Lakes).<sup>2</sup> The rail share has been trending higher, in large part a reflection of the growth in PRB coal that often moves by rail. PRB coal production more than doubled from 200 million tons in 1990 to an estimated 429 million tons in 2005.

Coal is by far the highest-volume single commodity carried by rail, and railroads are moving more coal today than at any time during their history. In 2005, Class I carriers originated 7.20 million carloads of coal (23 percent of total carloads), equal to 804 million tons (42 percent of total tonnage). Coal has long been a major source of rail revenue as well. Class I gross revenue from coal in 2005 was \$9.4 billion, or 20 percent of total gross revenue. Coal is also carried by dozens of non-Class I railroads.<sup>3</sup>



<sup>2</sup> 2.6 percentage points are "unknown" for 2004 because of data availability problems.

<sup>3</sup> U.S. freight railroads are classified by the Surface Transportation Board on the basis of revenue. The seven Class I railroads had revenue of at least \$289.4 million in 2004. Class I carriers comprise 1 percent of freight railroads, but account for 70 percent of the industry's mileage operated, 89 percent of its employees, and 93 percent of its freight revenue. The vast majority (though not all) of the rail-hauled coal in the United States moves on Class I railroads.

As noted earlier, rail tons of coal originated in 2002, 2003, and 2004 were less than in 2001, but rail coal traffic has been surging more recently. Railroads helped move a record 429 million tons of PRB coal in 2005 and could see a 10 percent increase in 2006. Eastern railroads too are expecting to set new coal-hauling records in 2006. For all U.S. railroads, average weekly U.S. coal carloadings in May 2006 were the highest of any month in history, and U.S. coal carloadings in the first four months of 2006 were all among the top months in history as well.

Coal hauling on railroads has become much more sophisticated than it used to be. Most coal on railroads moves in highly productive unit trains, which often operate around the clock, use dedicated equipment, generally follow direct shipping routes, and have lower costs per unit of coal shipped than non-unit train shipments.

Events of the past year show that it takes time to adjust to fluctuations in coal supply and demand, so railroads are emphasizing the need for coordinated, timely planning with customers and suppliers. To this end, railroads meet regularly with coal companies and electricity producers to determine how to best conform rail transportation offerings to their needs. These joint efforts include such objectives as meeting peak period demand and performing track maintenance as efficiently and unobtrusively as possible.

In addition, technological advances have led to more powerful and fuel efficient locomotives; distributed power operating practices that allow more coal to move in each train with greater reliability and safety; improved signaling systems; stronger, more durable track; lighter, higher-capacity coal cars (in 2005 the average coal car carried 111.7 tons, up 14 percent from the 98.2 tons in 1990); and higher capacity, faster coal loading and unloading systems, to name a few.

Improvements in train operations — including more accurate short-term demand forecasting and more efficient dispatching and routing — have also helped railroads meet the needs of their coal customers as efficiently and cost effectively as possible.

### **Serious Weather-Related Problems Affected Coal Deliveries in 2005**

The rail transportation of coal was negatively affected in 2005 by especially serious weather-related problems in the western United States, which has become an increasingly important source of coal.<sup>4</sup> In May 2005, two coal trains derailed on the heavily-used Southern Powder River Basin Joint Line (Joint Line) in Wyoming. The line is jointly owned and used by BNSF Railway and Union Pacific. Subsequent investigation found that the derailments were caused by a weakening of the roadbed due to a combination of accumulated coal dust and significant rain and snow over a short time period. This marked the first time that derailments were caused by this combination of factors. The derailments and subsequent comprehensive repair program disrupted the flow of trains to and from the SPRB.

In early October 2005, a severe thunderstorm dumped approximately 12 inches of rain in the Topeka, Kansas region, created runoff that caused bridge damage and extensive washouts on several major coal-carrying rail routes, impeding rail traffic nearly all of October until the last bridge was replaced.

And, of course, Hurricanes Katrina and Rita created massive disruptions to rail operations, not only in the immediate areas of the hurricanes, but also throughout the country, as the effects of the storms rippled throughout the national rail network.

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<sup>4</sup> The PRB, the major Western coal-producing area, accounted for 19 percent (200 million tons) of U.S. coal production in 1990. In 2005, the 429 million tons produced in the PRB accounted for 38 percent of U.S. coal production.

It is important to remember that the rail system is a 140,000 mile outdoor assembly line, and railroads can have problems. Railroads recognize that major disruptions exert a substantial toll on rail customers as well as on the railroads themselves, which is why railroads work exceedingly hard to return their operations to normal service as quickly as possible. In 2005 and into this year, not every coal consumer has been able to obtain all the coal it has wanted as quickly as desired. This consequence of weather-related outages and capacity constraints throughout the coal production and logistical chain will be temporary, as long as policymakers do not overreact with inappropriate policy prescriptions.

### **Coal Stockpiles Are on the Upswing**

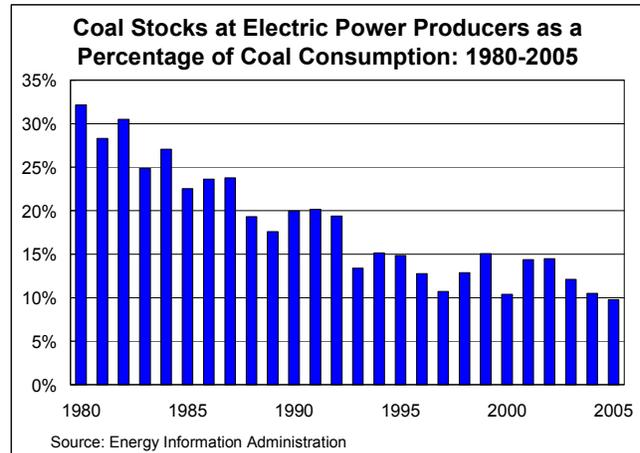
Freight railroads have come under attack for allegedly forcing coal-fired power plants to reduce their coal stockpiles to extremely low levels. In a few cases, coal-fired power plants have allegedly had to curtail power production because of the unavailability of rail-delivered coal, and then had to purchase more expensive electricity on the spot market or generate electricity from more expensive fuels like natural gas. A few utilities have complained that they have had to import coal to replace domestic coal that was not delivered.

Railroads are in constant communication with their coal customers, and make every effort to ensure adequate coal supplies. Despite railroads' best efforts, there may be times when a particular plant has temporary acute shortages — but this is an extremely rare occurrence.

The fact is, despite the serious weather-related disruptions to coal movements in 2005, record overall demand for rail transportation that resulted in capacity constraints on important corridors and at critical locations on the rail network, and periodic production disruptions at mines, the overwhelming majority of rail-served power plants received adequate coal supplies in 2005 and are receiving adequate coal supplies in 2006.

Coal-fired power plants have been reducing their coal stockpiles since the early 1980s. A typical electric utility held nearly two months of full-load burn in the early 1980s; by the late 1990s, this had fallen to near one month.<sup>5</sup>

According to EIA data, coal stocks at electric power producers as a percentage of coal consumption fell from more than 30 percent in 1980 to 10 percent by 2000. The decision to reduce stockpiles was part of a deliberate utility effort to shift to just-in-time inventory



practices to limit capital tied up in fuel stocks.<sup>6</sup> With inventory reduced to this degree, utilities eliminated a traditional buffer to withstand supply disruptions (like the May 2005 PRB derailments noted above).

Although the mines and railroads are on target to produce and move substantially more coal in 2006 than ever before, it may be less than what some receivers want to fully rebuild their inventories. But there is no indication that there will be shortfalls that threaten electricity reliability.

The National Electric Reliability Council (NERC) seems to agree. NERC is the umbrella organization for eight regional reliability councils whose members come from all segments of the electric power industry and account for nearly all electricity in this country. NERC's mission is to ensure that the bulk power system in North American is reliable, adequate, and secure.

<sup>5</sup> Stan Kaplan, et. al., "Coal and gas prices: planning for an uncertain fuel future," *Power Engineering*, January 2003, p. 20. At the time of this article, Mr. Kaplan was a branch chief in the electric division of EIA.

<sup>6</sup> Richard Bonskowski, *The U.S. Coal Industry in the 1990's: Low Prices and Record Production*, Energy Information Administration, September 1999.

A few weeks ago, the NERC released its “2006 Summer Assessment” that examines the reliability of the North American bulk power system for the upcoming summer season. In reference to the nation as a whole and after noting the flooding and derailments last year, NERC noted that although it will be monitoring the supply of PRB coal, “Coal delivery limitations do not appear to present a reliability problem for this summer.”

NERC made similar assessments in reference to individual regions:

- Electric Reliability Council of Texas (ERCOT): “It is also anticipated that no significant problems with coal supply deliveries impacting reliability in ERCOT are expected this summer.”
- Florida Reliability Coordinating Council (FRCC): “...the PRB coal delivery issue is expected to be of minimal impact to regional capacity.”
- Midwest Reliability Organization (MRO - covers north central U.S.): “The MRO has surveyed the Powder River Basin coal delivery situation in the region and the results show that no direct impacts to the reliability of meeting peak electrical demand.”
- ReliabilityFirst Corporation (RFC – covers northern Illinois, the Mid-Atlantic, and parts of the Northeast): “Deliveries of PRB coal are no longer limited due to last May’s derailment and subsequent track maintenance. Significant coal delivery problems are not expected for RFC members this summer.”
- Southeastern Electric Reliability Council (SERC): “The majority of SERC members do not rely on PRB coal. SERC members that do receive PRB coal have experienced some reduced deliveries, but are presently receiving sufficient PRB coal.”
- Southwest Power Pool (SPP): “The coal supply issue due to the PRB railroad issue is not considered to be a high-risk issue by SPP members regarding supply adequacy.”
- Western Electricity Coordinating Council (WECC): “A fuel supply survey taken last fall indicated that only a handful of coal-fired plants have been directly affected by last year’s coal delivery interruptions from the Powder River Basin coal fields. The operators of those plants reported experiencing supply interruptions during the summer and had reported that winter deliveries had returned to normal.”

NERC’s reliability appraisal will probably not stop rail critics from continuing to warn about the possibility of “rolling blackouts” and other untoward events this summer due to rail delivery issues. These misrepresentations serve no useful purpose.

In addition, last month FERC's own Office of Enforcement presented its summer energy market assessment for 2006. The assessment noted that "coal stockpiles ...are well above last year's levels .... While worth watching, staff's view is that coal stockpiles are likely to continue building." FERC's assessment notes a few areas where inadequate investment by the electric power sector could cause problems, saying it is "concerned about key load pockets where investment in needed infrastructure has not kept up with needs."

Articles in the trade press further support the claim that coal stockpiles are increasing. For example, the May 19, 2006 Platt's *Coal Trader* reports that utilities "have good stockpile levels of around 30 days," and notes that many utilities have dropped out of the spot coal market, both because their inventories are strong and because natural gas prices have fallen to levels more advantageous for gas-fired generation. In the May 22, 2006 Platt's *Coal Outlook*, a coal salesman is quoted as saying, "in most instances, utilities inventories are very large right now." And a headline in the April 2006 *Coalcast* produced by Energy Ventures Analysis, Inc. (EVA) reads "Huge Jump in April Stocks – Stocks Almost Back to Normal." EVA reports that coal stockpiles rose 14.4 million tons in April (56 percent above normal April increases) and are up 24.9 million tons since the beginning of 2006. EVA specifically notes that the increase in coal stockpiles was due in part to improved PRB rail shipments.<sup>7</sup>

Although traffic out of the PRB is back up to record volumes, the preventive cleaning of the ballast beneath the rails is still underway. Going forward, one of the root causes of the weather-related problems of 2005 — coal dust "blow off" — must be aggressively addressed.

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<sup>7</sup> To be sure, many factors are influencing current stockpile levels, including, for example, higher availability of hydroelectric power in some parts of the country, lower natural gas prices, and the fact that April is a "shoulder" month before higher summer demand sets in and thus a good opportunity to rebuild stockpiles. There is no doubt, though, that more fluid rail operations, including out of the PRB, are having a substantial positive effect on utility stockpile levels.

Just as with other coal delivery chain issues, the mines, utilities, and railroads must collectively identify, agree upon, and implement the best method to combat “blow off” so that the premature wear of rail infrastructure in the PRB can be eliminated.

A few words on coal imports are appropriate. In 2005, U.S. coal imports totaled 30.7 million tons — a record high, but still a continuation of a trend toward increasing U.S. coal imports that has been underway for many years (starting well before the PRB coal delivery problems in 2005). Moreover, U.S. coal imports in 2005 were equal to just 2.7 percent of U.S. coal consumption and significantly less than the 49.9 million tons of U.S. coal exported in 2005. The vast majority of U.S. coal imports are destined for utilities on or near the coast in the Southeast and the Northeast, which can take advantage of ocean shipping rates that, while variable, can be extremely competitive relative to other forms of transportation.

Given that the coal market is international in scope, that the major suppliers of U.S. coal imports (Colombia, Venezuela, and Indonesia) offer quality coal at extremely competitive prices, and that there are no artificial barriers (*i.e.*, quotas or tariffs) to U.S. coal imports, the relative paucity of U.S. coal imports is a testament to the extreme competitiveness of those involved in the U.S. coal supply and distribution chain, including railroads.

### **Meeting Future Coal Transportation Needs**

U.S. coal production and consumption will almost certainly continue to grow, especially if environmental issues related to coal-based generation are resolved. In its *Annual Energy Outlook 2006*, released in December 2005, the EIA projects that U.S. coal production in 2015 will total 1.27 billion tons, a 140-million ton increase (12 percent) over the 1.13 billion produced in 2005. The EIA expects U.S. coal consumption to increase from 1.13 billion tons in 2005 to 1.28 billion tons in 2015, a 147-million ton increase. DOE’s National Energy Technology

Laboratory reports that 140 coal-fired generating plants in 41 states representing 85 gigawatts have been announced or are in development.<sup>8</sup> If ultimately built, this new generation would increase annual U.S. coal requirements by some 300 million tons.

As noted earlier, since 1990 railroad coal movements have increased along with coal production and consumption. With coal demand expected to continue to rise for the next decade and beyond, railroads will be called upon to move much more coal than they do today.

Railroads' past performance strongly suggests that they will be able to handle this increased demand for coal transportation. From 1990 to 2005, U.S. coal production rose 10 percent, while rail coal tons originated rose 26 percent and rail coal ton-miles rose over 80 percent — both multiples of the growth in coal production. This market response by railroads can continue only if railroads' ability to make the necessary investments in their networks is not constrained.

To help ensure that adequate coal-carrying capacity is specifically available to meet future coal transportation needs, railroads are taking a variety of actions, including making massive investments in their infrastructure and equipment.

Railroading is a network business, meaning that operational improvements or investments in one location can affect rail traffic at distant locations on the network. For this reason, even investments made on rail lines that do not carry substantial volumes of coal can have a positive effect on railroads' coal-carrying operations.

From 1980 through 2005, Class I railroads invested nearly \$360 billion (and short lines spent additional billions) to maintain and improve infrastructure and equipment, with most of this spending indirectly or directly benefiting coal movements. After accounting for depreciation, freight railroads typically spend \$15 billion to \$17 billion per year — equal, on

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<sup>8</sup> Press release, Peabody Energy, April 18, 2006.

average, to around 45 percent of their operating revenue — to provide the high quality assets they need to operate safely and efficiently.

Moreover, rail capital spending, which is already enormous, is expected to rise to around \$8.3 billion in 2006, up from around \$5.7 billion just four years earlier.

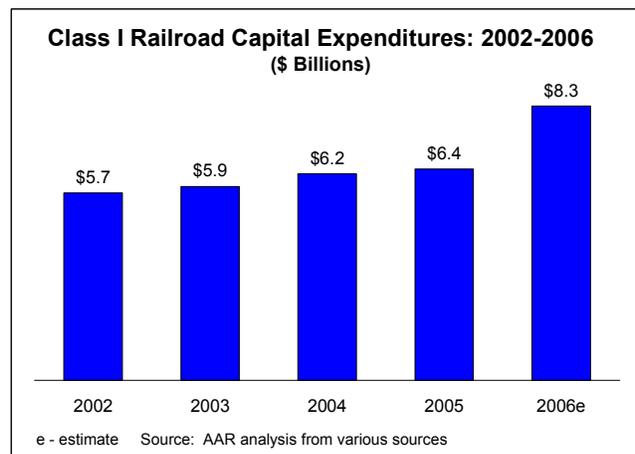
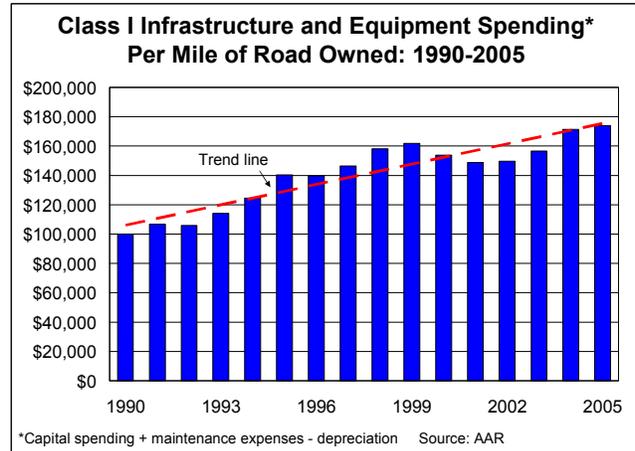
This huge increase demonstrates the diligence with which railroads are responding to the capacity and service issues.

Railroads essentially have no choice but to reinvest enormous sums back into their systems. It takes a massive amount of money

to run a freight rail system; it simply cannot be done on the cheap. The rail industry is at or near the top among all U.S.

industries in terms of capital intensity. From 1995-2004, U.S. Class I railroads spent, on average, 17.8 percent of their revenue on capital expenditures. The comparable figure for U.S. manufacturing as a whole was just 3.5 percent.

Similarly, in 2004, Class I railroad net investment in plant and equipment per employee was \$667,000 — more than eight times the average for all U.S. manufacturing (\$78,000).



**Capital Expenditures as a % of Revenue for Various U.S. Industries: Avg. 1995-2004**

<b>Average all manufacturing</b>	<b>3.5%</b>
Food manufacturing	2.6%
Transportation equip. mfg.	2.8%
Machinery manufacturing	3.0%
Wood product mfg.	3.0%
Petroleum & coal products mfg.	3.0%
Fabricated metal product mfg.	3.5%
Chemicals manufacturing	4.4%
Plastics & rubber products mfg.	4.5%
Paper manufacturing	4.7%
Computer & electr. product mfg.	5.0%
Nonmetallic mineral product mfg.	5.4%
Electric utilities	11.6%
<b>Class I Railroads</b>	<b>17.8%</b>

Note: Utilities are 1999-2004  
Source: U.S. Bureau of the Census, AAR, EEI

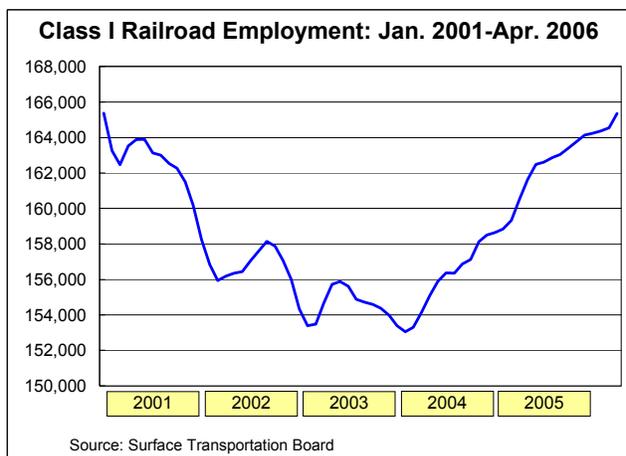
The following is just a sampling of the diverse types of capacity- and service-enhancing investments individual railroads have recently made or will soon make that will directly or indirectly benefit coal shippers:

- BNSF took delivery of 1,300 rapid-discharge aluminum coal cars in 2005, as well as 288 new locomotives, of which approximately 90 were assigned to coal service. BNSF plans to add 362 more locomotives in 2006, half of which will be used in coal service. Planned investments directly related to its coal business over the next couple of years include \$500 million to \$800 million on track and terminal expansions and well over \$1 billion on new locomotives. Over the past decade, BNSF has spent more than \$2.2 billion on investments specifically aimed at increasing coal-carrying capacity.
- Likewise, Union Pacific has spent enormous sums on its coal service, including more than \$1 billion over the past eight years on locomotives and another \$1 billion on track capacity enhancements specifically for coal. Major projects include completing the \$35 million Marysville, Kansas bypass to expedite PRB coal trains; completing a \$40 million Denver bypass to ease the flow of eastbound trains; a new siding on the North Fork branch line in Colorado; several sidings in Southern Illinois to support coal growth; and continuing a multi-year effort to install centralized traffic control on the Central Corridor East/West mainline in Iowa. In 2006, UP will acquire more than 500 new coal cars and dozens of additional locomotives to support coal.
- In May 2006, BNSF and UP agreed on plans to build more than 40 miles of third and fourth main line tracks, at a cost of about \$100 million over the next two years, to meet current and future forecasted demand for PRB coal. This project is in addition to the construction of 14 miles of a third main line track completed last year and an additional 19 miles of the third main line currently under construction and scheduled to be fully operational in September 2006. The total cost of this nearly 75-mile capacity expansion will be about \$200 million.
- In 2006, Canadian National will spend \$1.2 billion to \$1.3 billion on capital programs in the United States and Canada. Included are the reconfiguration of the key Johnston Yard in Memphis, a gateway for CN's rail operations in the Gulf of Mexico region; siding extensions in Western Canada; and investments in CN's Prince Rupert, British Columbia, corridor to capitalize on the Port of Prince Rupert's potential as an important traffic gateway between Asia and the North American heartland.
- In 2005, Canadian Pacific finished its biggest capacity enhancement project in more than 20 years by expanding its network from Canada's Prairie region to the Port of Vancouver. The project increased the capacity of CP's western network by 12 percent and improved the route structure from Canada's Pacific coast to the United States. Like other carriers, CP has added new sidings on congested corridors; taken delivery of dozens of new locomotives and newer, higher-

capacity freight cars; and hired and trained hundreds of new employees, many of whom will be in the United States.

- CSX plans to spend around \$1.4 billion per year on capital expenditures in 2006 and 2007, up from \$1 billion in the previous few years, with much of the spending benefiting coal. For example, major investments in the Southeast Express Corridor from Chicago to Florida will enhance coal movements to the growing Southeast market, and a new connection at Willows, Illinois provides a new route and improved capacity for western coal over the St. Louis gateway. In 2005, CSX rebodied 1,336 bottom-dump hoppers and repaired an additional 1,933 coal gondolas and bottom-dump hoppers. In 2006, CSX will rebuild 1,100 bottom-dump hoppers and repair an additional 1,341 coal cars. From 2005-2007, CSX will acquire 300 new locomotives, many of which will be in coal service.
- Kansas City Southern (KCS) plans to continue to invest in its coal network to reduce cycle times, improve asset utilization, and increase velocity. To improve the coal network in 2005, the KCS Pittsburg, KS yard was modified to allow for distributed power (DP) to be added to coal trains more efficiently. Double track in Heavener, OK was added to improve fueling throughput at the new KCS main line fueling facility. Also in 2005, five sidings were extended to allow for longer coal trains. In 2006, a new siding opened for operation, and a DP setout track is being built to allow for the efficient removal of the DP power. From late 2005 through the first quarter of 2006, KCS received 30 new locomotives to bolster the fleet available to transport coal and to improve on-time coal train deliveries.
- Norfolk Southern (NS) will purchase more than 220 new locomotives from late 2005 through mid-2006 to augment the hundreds purchased over the past few years. Scores of these locomotives have been used in coal service. NS is also in the midst of its largest-ever locomotive rehabilitation program — in 2005, 491 locomotives were overhauled and 29 were rebuilt; another 420 will be overhauled and 52 rebuilt in 2006. NS is investing \$60 million to add track capacity for coal movements between Memphis and Macon, Georgia, and \$42 million to build five miles of new line to improve rail service at a coal-fired power plant.

Rail capacity is a function of personnel in addition to infrastructure, and railroads have been aggressively hiring and training crews to expand capacity. After decades of steady decline, rail employment has been on the increase since 2004.



According to STB data, overall Class I employment in April 2006 was 3 percent higher than in April 2005 and 7 percent higher than in April 2004.

Other steps railroads are taking to enhance capacity and improve service include examining and, where appropriate, revamping their operating plans with an eye toward improved asset utilization and enhanced fluidity. Railroads are also engaging in innovative collaborations with each other and are constantly developing and adopting new technologies. For example, railroads are developing and implementing complex computer models to optimize train movements and trip planning.

Railroads are also successfully increasing productivity — tons of coal per train have been steadily increasing, for example — and are seeking ways to improve interchange speed and throughput at rail/barge terminals.

### **Railroad Reliability**

It is extremely gratifying that the nation's railroads have rebounded so robustly from the temporary delivery disruptions of the previous year. Nevertheless, some of our industry's detractors continue to argue that Congress should direct the federal Surface Transportation Board (STB) to develop and enforce mandatory reliability standards for rail carriers.

The fact is that over its 150-year history, the railroad community has developed within the private sector a comprehensive and effective body of rules and standards that are already intended to promote railroad reliability and safety. The 550+ individual railroads across the United States each pledge their agreement to these requirements, which include hundreds of interchange standards, car service and car hire rules, quality assurance programs, safety approaches, and tank car design standards. Compliance with the rules and standards is mandatory and is enforced by the AAR.

In addition to these commonly-accepted standards, railroads routinely negotiate bilateral arrangements with one another to accommodate freight traffic in the event of major derailments and track outages. In a prominent recent example, Norfolk Southern agreed to accept a significant volume of displaced rail traffic from CSX's Gulf Coast rail line after it was devastated by Hurricane Katrina last August. This arrangement continued during the several months it took CSX to restore six major bridges, more than 40 miles of track, and its major yard in New Orleans.

Finally, rail shippers that believe they are not receiving adequate service have an existing recourse through the STB. The STB's emergency service rules provide a shipper with a rapid means of obtaining alternative rail service if there is a substantial deterioration in the incumbent railroad's service. However, to the best of our knowledge, no electricity generator has approached the STB seeking such a remedy.

Short of this formal process, rail shippers can utilize the STB's Rail Consumer Assistance Program, which provides an informal process to address rail-related transportation issues.

## **Conclusion**

U.S. freight railroads do a remarkable job in meeting the needs of an extremely diverse set of shippers. Railroads move hundreds of thousands of railcars and tens of millions of tons to and from thousands of origins and destinations every day, and no commodity accounts for more carloads and tons than coal. The vast majority of these shipments arrive in a timely manner, in good condition, and at rates that shippers elsewhere in the world would love to have.

Railroads work extremely hard to keep their coal service as responsive and productive as possible. They meet regularly with coal companies and electricity producers to help ensure that rail service conforms to customer needs. They invest billions of dollars each year in infra-

structure and equipment. These investments, along with technological improvements that enable them to use their assets more productively, have allowed railroads to increase their coal-carrying capacity and capability as coal demand has climbed.

Still, it is clear that the entire coal logistical chain, including the rail transportation of coal, can be improved, and railroads are eager to work constructively with coal suppliers and coal consumers to find reasonable ways to achieve this goal.